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In the United States Patent and Trademark Office

Appellants: Jason S. Fairbanks, Frank P. Abuto, Docket No.: 18645
Stephen F. Borengasser
Serial No.: 10/631,144 Group: 1774
Confirmation 2240 Examiner: Edwards, Newton O.
Filed: July 31, 2003 Date: July 5, 2005
For: CRIMPED THERMOPLASTIC MULTICOMPONENT FIBER AND FIBER
WEBS AND METHOD OF MAKING

Appeal Brief Transmittal Letter

Mail Stop Appeal Brief - Patents
Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. 41.37, transmitted herewith is an Appeal Brief pursuant to the Notice of Appeal which was mailed on April 4, 2005.

Please charge the \$500.00 fee (fee code 1402), pursuant to 37 C.F.R. 41.20(b)(2), which is due to Kimberly-Clark Worldwide, Inc. deposit account number 11-0875.

The undersigned may be reached at: 770-587-8908

Respectfully submitted,

JASON S. FAIRBANKS ET AL.

By Robert A. Ambrose

Robert A. Ambrose

Registration No.: 51,231

CERTIFICATE OF FACSIMILE TRANSMISSION

I, Robert A. Ambrose, hereby certify that on July 5, 2005 this document is being transmitted via facsimile to the United States Patent and Trademark Office, Central Fax No. (703) 872-9306.

By: Robert A. Ambrose

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WEBS AND METHOD OF MAKING

Brief on Appeal to the Board of Patent Appeals and Interferences

Mail Stop Appeal Brief - Patents
Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. 41.37 Appellants respectfully submit this Brief in support of their Appeal of Examiner Edwards' Final Rejection of claims 16-19 which was mailed on December 02, 2004.

On Monday, April 04, 2005, Appellants, pursuant to 37 C.F.R. 41.31 transmitted their Notice of Appeal. Thus, the usual time for filing this Brief ends June 04, 2005. Accordingly, a petition for a one month extension of the time is submitted herewith, bringing the time to file this Brief to Monday, July 4, 2005, which is a Federal Holiday. Therefore, it is believed that this Brief is timely filed on Tuesday, July 5, 2005, along with the petition for one month extension of the time. However, should the one month extension be determined to be insufficient, please charge any additional extension fees to deposit account number 11-0875.

Real Party in Interest

The present Application has been assigned to Kimberly-Clark Worldwide, Inc.

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Related Appeals and Interferences

There are no other appeals or interferences known to Appellants, their legal representatives or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision on this appeal.

Status of the Claims

Claims 1-26 remain in the application with claims 16-19 being finally rejected and claims 20 and 21 found to be allowable but objected to as being dependent on a rejected base claim. Claims 1-15 and 22-26 have been withdrawn.

Status of Amendments Filed Subsequent to Final Rejection

No amendments have been filed subsequent to final rejection.

Summary of the Invention For Each Independent Claim

The present invention is directed to a crimped fiber. As claimed in independent claim 16, the invention is directed to a crimped thermoplastic multicomponent fiber including a first thermoplastic component and a second thermoplastic component (please see, e.g., page 4, lines 12-15 and please also see FIGs. 4A - 4D for copies of photos of such crimped thermoplastic multicomponent fibers). The components are arranged in a crimpable cross-sectional configuration (please see, e.g., page 4 lines 12-16 and FIGs. 1A-1B), and the first thermoplastic component includes at least about 5 percent by weight of a dielectrically susceptible additive material (please see, e.g., page 4, lines 16-21).

Statement of Each Ground of Rejection Presented For Review

Claims 16-19 stand finally rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Number 6,710,242 to Iguro et al. in view of U.S. Patent Number 6,410,138 to Mleziva et al.

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Argument

The Examiner has rejected claims 16-19 as obvious over U.S. Patent Number 6,710,242 to Iguro et al. (hereinafter "Iguro et al.") in view of U.S. Patent Number 6,410,138 to Mleziva et al. (hereinafter "Mleziva et al."). Although this was the first rejection over Iguro et al. in view of Mleziva et al., the Examiner made the rejection final, stating that Applicants' (now Appellants') amendment necessitated this new ground of rejection. Appellants respectfully submit that the Examiner's Final Rejection of claims 16-19 as obvious over Iguro et al. in view of Mleziva et al. is improper and must be reversed.

Iguro et al. teach a composite conductive fiber in a sheath/core configuration and having conductive carbon black in the sheath. The Examiner took Office Notice that "composite" includes sheath/core and side-by-side configurations, although Iguro et al. do not teach other than conventional sheath core. The fiber taught has a specific relationship between the radii of the core and sheath. Please see Iguro et al. at Abstract. As stated by Iguro et al., the intended purpose of the fibers taught therein is to have superior conductivity in a surface resistance measuring method and have good spinning and post-processability. Please see Iguro et al. at the final BACKGROUND paragraph, col. 1 lines 53-57. As noted by the Examiner, Iguro et al. do not teach such fibers being crimped.

To remedy the stated deficiency of Iguro et al., the Examiner combined with Iguro et al. the teachings of Mleziva et al., relating to multicomponent (or composite) filaments having a crimp enhancement additive that allows for highly crimped filaments. Mleziva et al., being directed to highly crimped filaments, do teach eccentric sheath/core and side-by-side configurations. The Examiner stated that it would have been obvious for one skilled in the art to incorporate the teaching of Mleziva et al. in the fiber as taught by Iguro et al. in order to provide a crimped fiber with increased bulk, softness, and drapability.

According to MPEP §2143, in order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

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Appellants submit that a *prima facie* case of obviousness has not been established because, as described below, (A) there has been no showing of proper motivation to combine the cited references; (B) furthermore there is no motivation to make such a combination because the cited art clearly teaches away from the combination; and (C) still furthermore, motivation is lacking because such a combination would render the art fiber unsatisfactory for its intended purpose.

(A) There has been no showing of a proper motivation to combine:

In the Final Office Action, the Examiner explained the purported motivation to combine by stating it would have been obvious for one skilled in the art to incorporate the teaching of Mleziva et al. in the fiber as taught by Iguro et al. in order to provide a crimped fiber with increased bulk, softness, and drapability. However, as stated in MPEP §2143.01, "Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art."

Appellants are unable to find any desirability in the cited references to modify the fiber as taught by Iguro et al. via the teaching of Mleziva et al. Iguro et al. does not appear to recognize any deficiency in the bulk/softness/drapability properties of the fiber taught therein and Appellants respectfully submit that a conclusory statement that one skilled in the art would seek to so modify the carbon black-containing conductive fiber of Iguro et al. appears to be no more than a statement that one skilled in the art could make such a combination. In addition, the purported statement of motivation ignores the fact that, if a simple crimped fiber with increased bulk, softness, and drapability is desired, it is already readily provided via the teachings of Mleziva et al. without the additional difficulties of attempting to spin thermoplastic fibers containing conductive carbon black, as in the conductive fibers of Iguro et al. According to MPEP §2143.01, the "mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." (citing *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990)).

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(B) The cited art clearly teaches away from the combination:

In addition, Appellants respectfully submit that there is no motivation to make such a combination because the cited art clearly teaches away from the combination. Please see Iguro et al. at col. 3, lines 41-50, where Appellants submit that Iguro et al. teach that for their conductive fiber, any crimp, let alone high crimp, is undesirable. As stated therein, having "waviness" in the fiber makes for a fiber of "poor passableness". Iguro et al. teach that "decentering" of the core component can cause this poor passableness due to waviness, and in addition also teach that decentering of the core causes "poor coherency" of yarn made from their conductive fibers. Therefore, Appellants submit that one skilled in the art, upon reading the full teachings of Iguro et al., would be led to make those fibers as straight as possible, not highly crimped, as indicated by the Examiner's statement of motivation.

Please also note Iguro et al. teach that "decentering" is undesirable. The Examiner took Office Notice that "composite" includes side-by-side in addition to sheath/core. However, Appellants submit that their fibers, requiring a "crimpable cross sectional configuration" (such as, for example, eccentric sheath core or side-by-side configurations, or, for example, the shaped configurations stated in the Application at page 11, lines 13-20) are not compatible with the teachings of Iguro et al. As taught in Iguro et al., the proper composite configuration for their conductive fiber is a centered sheath/core fiber which Appellants submit and which as taught by Iguro et al. is not susceptible to crimp or waviness. Contrariwise, Iguro et al. clearly teach that a crimpable configuration such as the "decentered" sheath core (which term Appellants submit is similar, if not equivalent, to the crimpable-type configuration term "eccentric sheath core" as used by both Appellants and Mleziva et al.) is to be avoided.

In addition to the teachings in Iguro et al. away from any general waviness (crimp) and teachings away from having decentered core, Iguro et al. also teach away from using other crimpable configurations such as the side-by-side configuration mentioned by the Examiner. Please see Iguro et al. at "INDUSTRIAL APPLICABILITY" at col. 10 lines 44-47 where it states that the fiber of that invention, "is in the form that the conductive component completely surrounds the non-conductive component and the conductive component is exposed to the whole surface". Therefore, Appellants submit that Iguro et al. not only teach away from waviness (crimp) generally, but crimpable cross sectional configurations such as are taught in

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Mleziva et al. (side-by-side, eccentric sheath core) specifically.

(C) The combination would render the art fiber unsatisfactory for its intended purpose:

According to MPEP §2143.01, if the "proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." (citing *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)). As stated by Iguro et al. at col. 1 lines 53-57, the intended purpose of their fibers is to have superior conductivity in a surface resistance measuring method, and to have good spinning and post-processability. As further described by Iguro et al. at col. 3, lines 41-50, if the fiber has "waviness" (e.g., crimp) then it has "poor passableness of the post process because of the waviness". A further statement of this intended purpose of the Iguro et al. fibers may be found under "INDUSTRIAL APPLICABILITY" at col. 10 lines 44-58 where it repeats that the fibers should have good passableness of the spinning process and post process.

Therefore, Appellants respectfully submit that modifying the fiber of Iguro et al. into a crimped or wavy fiber as suggested by the Examiner would certainly render the fiber unsatisfactory for its stated purpose. Also as noted above, Iguro et al. state that "decentering" of the core component core (such as a crimpable eccentric sheath/core configuration) causes "poor coherency" of yarn made from those conductive fibers; thus Appellants submit that decentering of the core (with or without waviness) appears of itself to render the fiber unsatisfactory. Furthermore, in the "INDUSTRIAL APPLICABILITY" section at lines 44-47 it also states that the conductive sheath is to completely surround non-conductive core material; thus, Appellants submit that use of the other crimpable configuration mentioned by the Examiner, a side-by-side configuration, would also of itself (with or without attendant waviness or crimp) render the Iguro et al. fiber unsatisfactory for its purpose.

Conclusion

For the reasons stated above it is Appellants' position that the Examiner's rejection of claims has been shown to be untenable and should be reversed by the Board.

Please charge the \$500.00 fee (fee code 1402), pursuant to 37 C.F.R. 41.20(b)(2), for filing this Appeal Brief to Kimberly-Clark Worldwide, Inc. deposit account number 11-0875. Any

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additional prosecutorial fees which are due may also be charged to deposit account number 11-0875.

The undersigned may be reached at: 770-587-8908

Respectfully submitted,

JASON S. FAIRBANKS ET AL.

By Robert A. Ambrose

Robert A. Ambrose

Registration No.: 51,231

CERTIFICATE OF FACSIMILE TRANSMISSION

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By: Robert A. Ambrose

Robert A. Ambrose

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Appendix – The Claims On Appeal

The claims on appeal are:

1. (withdrawn) A method of making a crimped thermoplastic multicomponent fiber comprising:
 - extruding a multicomponent fiber from a thermoplastic melt in a crimpable cross-sectional configuration, the multicomponent fiber comprising a first thermoplastic component and a second thermoplastic component, wherein the first component includes a dielectrically susceptible material;
 - quenching the multicomponent fiber;
 - attenuating the multicomponent fiber to form a substantially uncrimped thermoplastic fiber; and
 - subjecting the multicomponent fiber to a dielectric energy field to activate the crimp.
2. (withdrawn) The method of Claim 1 wherein a plurality of the fibers is formed and further comprising the step of collecting the fibers upon a moving surface to form a nonwoven web of multicomponent fibers.
3. (withdrawn) The method of Claim 2 wherein the step of subjecting the multicomponent fibers to the dielectric energy field occurs after the step of collecting the multicomponent fibers upon the moving surface.
4. (withdrawn) The method of Claim 3 further comprising the step of bonding the nonwoven web and wherein the step of subjecting the multicomponent fibers to the dielectric energy field occurs after the step of bonding the nonwoven web.
5. (withdrawn) The method of Claim 2 wherein the first thermoplastic component comprises a polyolefin thermoplastic polymer and a dielectrically susceptible additive material selected from the group consisting of carbon black, ferrite, tin oxide, silicon carbide, calcium chloride, zircon, magnetite, silicon carbide, calcium chloride, alumina, magnesium oxide, and titanium dioxide.
6. (withdrawn) The method of Claim 5 wherein the first component comprises from about 60% by weight to about 95% by weight polypropylene and from about 5% by weight to about 40% by weight carbon black.

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7. (withdrawn) The method of Claim 6 wherein the second component is polyethylene.
8. (withdrawn) The method of Claim 7 wherein the crimpable cross-sectional configuration is a side-by-side configuration or an eccentric sheath-core configuration.
9. (withdrawn) A method of making a nonwoven web comprising crimped thermoplastic multicomponent staple length fibers comprising:
 - forming multicomponent staple length fibers into a nonwoven web, the multicomponent staple length fibers comprising a first thermoplastic component and a second thermoplastic component in a crimpable cross-sectional configuration, wherein the first component includes a dielectrically susceptive material; and
 - subjecting the staple length fibers to a dielectric energy field to activate the crimp.
10. (withdrawn) The method of Claim 9 further comprising the step of bonding the nonwoven web by a method selected from the group consisting of thermal point bonding, through air bonding, adhesive bonding and entanglement bonding.
11. (withdrawn) The method of Claim 10 wherein the step of subjecting the staple length fibers to the dielectric energy field occurs prior to the step of forming the fibers into a nonwoven web.
12. (withdrawn) The method of Claim 10 wherein the step of subjecting the staple length fibers to the dielectric energy field occurs after the step of forming the fibers into a nonwoven web.
13. (withdrawn) The method of Claim 10 wherein the step of subjecting the staple length fibers to the dielectric energy field occurs after the step of bonding the nonwoven web.
14. (withdrawn) The method of Claim 9 wherein the nonwoven web further comprises secondary fibers and wherein at least some of the crimped thermoplastic staple length fibers wrap around at least some of the secondary fibers when the crimped is activated.
15. (withdrawn) The method of Claim 14 wherein the secondary type of fiber is selected from the group consisting of cellulosic fibers and thermoplastic staple length fibers.

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16. (previously presented) A crimped thermoplastic multicomponent fiber comprising a first thermoplastic component and a second thermoplastic component arranged in a crimpable cross-sectional configuration, wherein the first thermoplastic component includes at least about 5 percent by weight of a dielectrically susceptible additive material.
17. (original) The crimped thermoplastic multicomponent fiber of Claim 16 wherein the crimpable cross-sectional configuration is a side-by-side configuration or an eccentric sheath-core configuration.
18. (previously presented) The crimped thermoplastic multicomponent fiber of Claim 17 wherein the first component comprises a dielectrically susceptible copolyester.
19. (previously presented) The crimped thermoplastic multicomponent fiber of Claim 17 wherein the first component comprises a polyolefin thermoplastic polymer and wherein said dielectrically susceptible additive material is carbon black.
20. (original) The crimped thermoplastic multicomponent fiber of Claim 19 wherein the first component comprises from about 60% by weight to about 95% by weight polypropylene and from about 5% by weight to about 40% by weight carbon black.
21. (original) The crimped thermoplastic multicomponent fiber of Claim 20 wherein the second component comprises polyethylene.
22. (withdrawn) A nonwoven web comprising a plurality of the crimped thermoplastic multicomponent fibers of Claim 16.
23. (withdrawn) A nonwoven web comprising a plurality of the crimped thermoplastic multicomponent fibers of Claim 16 and further comprising secondary fibers, wherein at least some of the crimped thermoplastic fibers are wrapped around at least some of the secondary fibers.
24. (withdrawn) The nonwoven web of Claim 23 wherein the secondary fibers comprise cellulosic fibers and the nonwoven web further comprising superabsorbent material.
25. (withdrawn) An absorbent article comprising an absorbent core material, the absorbent core material comprising the nonwoven web of Claim 24.

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26. (withdrawn) An absorbent article comprising the nonwoven web of Claim 22.